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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,601	11/10/2003	Stephen Alistair Smith	P31828C3	5671
7590 04/21/2004				
GLAXOSMITHKLINE				
Corporate Intellectual Property - UW2220				
P.O. Box 1539				
King of Prussia, PA 19406-0939				
EXAMINER				
KIM, JENNIFER M				
ART UNIT		PAPER NUMBER		
1617				
DATE MAILED: 04/21/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/705,601	<b>Applicant(s)</b> SMITH, STEPHEN ALISTAIR	
	<b>Examiner</b> Jennifer Kim	<b>Art Unit</b> 1617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 22-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/10/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

**Claims 22-59 are presented for examination.**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 22-42, 45-56 and 59 are rejected under 35 U.S.C. 102(e) as being anticipated by Ikeda et al. (U.S. Patent No. 5,965,584) of record.

Ikeda et al. teach a pharmaceutical composition comprising an insulin sensitivity enhancer (Applicant's active agent, BRL-49653) (column 10, lines 52 and 53) and an insulin secretion enhancer (glimepiride) and a pharmaceutically acceptable carrier

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useful for the treatment of diabetes. (abstract, column 2, line 48-column 3, line 10, column 10, lines 39-40, lines 52-53, column 12, lines 45-48). Ikeda et al. teach preferable examples of salts include salts with maleic acid. (column 10, lines 17-20). Ikeda et al. teach the composition can be formulated in tablets, capsules and injection. (column 13, lines 38-40). Ikeda et al. teach excipients such as hydroxypropylcellulose, lactose, hydroxypropylmethylcellulose and microcrystalline cellulose can be employed in the composition. (column 13, lines 49-63, column 14 lines 20-21). Ikeda et al. teach the composition is low in toxicity and can be safely used in mammals. (column 14, lines 44-47). Ikeda et al. teach the dosage of the composition may be appropriately determined with reference to the dosages recommended for the respective active components and can be selected appropriately according to the recipient for example, the dosage of the insulin sensitivity enhancer for an adult can be selected from the clinical oral dosage range of 0.01 to 10mg/kg and the clinical parenteral dose range of 0.005 to 5mg/kg body weight. (column 14, lines 55-63). Ikeda et al. teach the preferred frequency of administration of the composition is 1 to 3 times a day. (column 14, lines 65-67). It is noted that Applicants' dosage is encompassed by the prior art since the dosage range recommended for the adult (average, 70kg) is 0.35mg to 350mg/ day as taught by prior art.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 43, 44, 57 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda et al. (U.S. Patent No. 5,965,584) of record.

Ikeda et al. as applied as before and additional teaching as follows:

Ikeda et al. teach the composition can be dissolved or suspended in an aqueous vehicle (e.g. distilled water).

Ikeda et al. do not teach the specific solvate as a hydrate set forth in claims 43, 33, 57 and 58.

It would have been obvious that the composition comprising of solvate is in a hydrate form because Ikeda et al. teach the composition can be dissolved or suspended in water and the upon the dissolution or suspending the active ingredient (solid) of the composition, the part of ingredient (solid) would obviously be present in hydrate form of the solid (e.g. solid.  $\text{XH}_2\text{O}$ ).

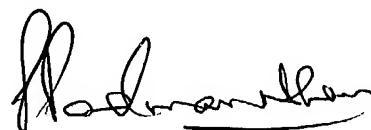
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For these reasons the claimed subject matter is deemed to fail to patentably distinguish over the state of the art as represented by the cited references. The claims are therefore properly rejected under 35 U.S.C. 103.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Kim whose telephone number is 571-272-0628. The examiner can normally be reached on Monday through Friday 6:30 am to 3 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sreenivasan Padmanabhan  
Supervisory Examiner  
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Jmk

March 31, 2004